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11/21/02

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION REPORT

**I. HEADING**

**DATE:** November 21, 2002

**SUBJECT:** Roberto Clemente Mercury Spill Site, Chicago, Cook County, Illinois

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**POLREP #: 2**

**II. BACKGROUND**

Response Authority: CERCLA Emergency Response-PRP oversight  
NPL Status: Non-NPL  
Site ID number: B55H  
Latitude: 41°54'08"N  
Longitude: 87°41'11"W  
State Notification: U.S. EPA assistance requested by CDOE  
Start Date: November 15, 2002  
Completion Date: TBD

**III. SITE INFORMATION**

**A. Incident Category**

CERCLA response to a mercury spill, several grams, in an active high school.

**B. Site Description**

**1. Site location and background**

See POLREP 1 dated November 16, 2002

**IV. SITE INFORMATION**

**A. Situation**

**1. Response activities to date**

At approximately 1000 on November 19, 2002, U.S. EPA, START, and CDOE visited the home of the student who brought mercury to Roberto Clemente High School on November 15, 2002. CDOE spoke to the father of the student who stated that the mercury came from a blood pressure gauge that was recovered from a warehouse that he and his son cleaned out for work. The father then stated that his son had opened the gauge containing the mercury in the home and was unaware of whether any had spilled in the home. The home was a two bedroom garden apartment and was approximately 420 square feet. CDOE requested that START and EPA be allowed to screen the home for mercury contamination and the father complied.

Upon entering the home it was first noticed the temperature inside the apartment was approximately 85°F. A small gas heater was located in the main room located in the center of the apartment. START used a Lumex mercury vapor analyzer to screen the apartment for mercury vapors. Immediately upon entering the home, the Lumex registered readings greater than 44,000 nanograms per cubic meter (ng/m<sup>3</sup>). All readings throughout the home were greater than 44,000 ng/m<sup>3</sup>, with the highest being 49,000 ng/m<sup>3</sup> in the sons bedroom. The action level for clean up in residential building is 1,000 ng/m<sup>3</sup>. Upon closer inspection, START noticed beads of visible mercury located throughout the entire house, with a majority being located in the sons bedroom. The blood pressure gauge that was the source of the mercury was located on a chair in the sons bedroom. The U. S. EPA notified the father that the apartment would need to be cleaned and no one was to be in the apartment until then. The heater in the apartment was turned off and the windows were opened in order to ventilate. U.S. EPA then mobilized the ERRS contractor.

At 1350 the ERRS remedial manager (RM) arrived on site. After touring the apartment the RM mobilized the crew and equipment needed to clean the apartment. At 1545 the ERRS crew arrived onsite. The ERRS RM mobilized a moving truck in order to provide temporary storage for all the personal belongings in the home. The ERRS crew then began wrapping all large furniture in plastic sheeting and placing them in the moving truck. After all large items were removed, ERRS used a hepa-filter vacuum to pick up all loose mercury on the floor of the home. Once the apartment was thoroughly vacuumed, the remaining personal items in the apartment were double bagged and placed in the moving truck or staged in the back yard. Using a turbo heater, all personal items were heated for approximately 20 minutes an attempt to decontaminate them. After being heated, START used the Lumex to screen the items. All items with a reading over 10,000 ng/m<sup>3</sup> were set aside for disposal. All other items were kept. After all items in the house were removed, ERRS scrubbed the all floors in the home with merc soap.

On November 20, 2002 ERRS mobilized a roll off box for disposal of all contaminated personal items. All contaminated personal items were placed in a 30 yd roll off box and hauled off site by SET Environmental. Once all contaminated personal items were disposed of, an attempt was made to heat and vent the apartment in order to bring the levels of mercury vapor down. After several attempts at heating and venting, Lumex readings in the home were still over 4,000 ng/m<sup>3</sup> in the son's bedroom and between 1,000 and 3,000 ng/m<sup>3</sup> in the rest of the home. Elevated readings of 2,690 ng/m<sup>3</sup> were also discovered in the bathroom sink drain. After discussing the problem, EPA, START, and ERRS decided that an attempt would be made to seal the floor, install linoleum over the existing tile, and caulk around the base boards of the wall.

On November 21, 2002, ERRS mobilized a plumber to install a new drain trap in the bathroom sink. ERRS used a sealant in an attempt to seal any possible vapor source. Two layers of sealant were spread throughout the home and left to dry over night. ERRS purchased the proper materials in order to install a new linoleum floor.

## **B. Planned Removal Activities**

- 1) ERRS will install linoleum flooring and caulk around the floor boards
- 2) START will collect confirmation air samples once Lumex readings indicated levels to be below 1,000

ng/m<sup>3</sup>

**C. Other Information**

- 1) The family living in the apartment has been temporarily relocated in a hotel during clean up activities
- 2) Appointments have been set up for the family to undergo medical monitoring for mercury exposure at a local clinic
- 3) EPA still awaits results from confirmation sampling conducted by Chicago Public Schools contractors
- 4) EPA has contacted local charities in regards to replacing personal items that have been disposed of

**E. Estimated Costs**

	CEILING	COSTS TO DATE
START	\$ TBD	\$ Not Available
ERRS	\$ 25,000	\$ Not Available
Total	\$ TBD	\$ Not Available

**VI. Waste Disposal**

On November 20, 2002, one 30 yd roll off box of mercury contaminated personal items was disposed of off site. Items were taken to Michigan Disposal Treatment Plant in Belleville, Michigan.